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ABSTRACT

Based on data from some of the Bureau of Labor Statistics' major statistical publication series, this booklet contains 16 graphic charts to illustrate patterns of change in the American economy and labor force. Charts depict (1) U.S. total labor force (1800-1975), (2) index of output per hour of all persons, total private economy (1909-1975), (3) persons employed in agriculture (1900-1975), (4) employees on nonagricultural payrolls by industry sector (1925-1975), (5) employment in selected occupations--computer programmers, data processing machine repairers, stenographers, and elevator operators--(1960-1985), (6) labor force participation rates by sex (1950-1975), (7) unemployed as percent of civilian labor force (1946-1975), (8) unemployed as percent of civilian labor force by race (1950-1975), (9) consumer price index for urban wage earners and clerical workers (1955-1975), (10) hourly earnings index, production and nonsupervisory workers in the private nonfarm economy (1967-1975), (11) employee compensation, manufacturing production workers, percent distribution (1959 and 1974), (12) educational attainment of the civilian labor force, percent distribution (1952 and 1975), (13) proportion of workers covered by Federal and State unemployment insurance programs (1938 and 1974), (14) U.S. membership in labor unions and membership as a proportion of labor force (1930-1974), (15) work stoppages: Idleness as a percent of total estimated working time, and (16) U.S. total labor force by sex: Projections to 1990. A list of the Bureau's regular publications, which provide greater statistical detail as well as information on how the data are obtained, is included. (JT)

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U.S. Workers and Their Jobs: The Changing Picture

U.S. Department of Labor
W. J. Usery, Jr., Secretary

Bureau of Labor Statistics
Julius Shiskin, Commissioner
1976

Bulletin 1919

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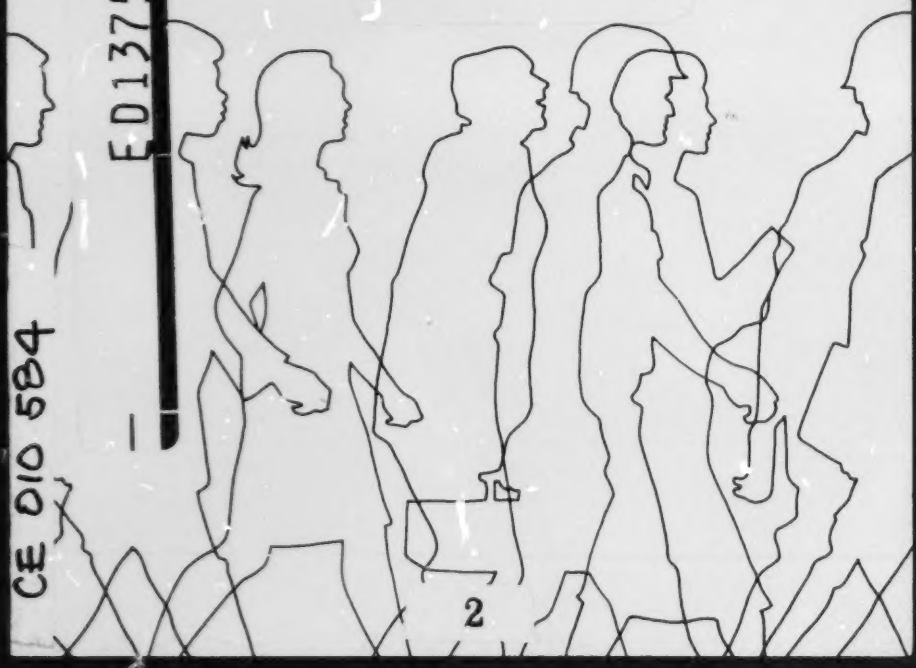

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Preface

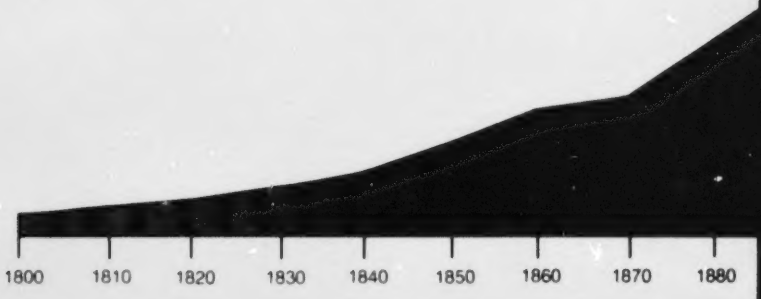
For more than 90 years, since its beginnings as the Bureau of Labor in 1884, the Bureau of Labor Statistics has been collecting and analyzing information on American workers and the factors affecting their welfare. Although the Bureau's task has grown as the Nation has grown, its aim has remained the same—to provide accurate and impartial data to serve the needs of many users. Today, as one of the major factfinding and statistical agencies of the Federal Government, the Bureau publishes a wide array of detailed data on the labor force, employment and unemployment, earnings and hours of work, prices and living conditions, industrial relations, productivity and economic growth, occupational injuries and illnesses, and related subjects.

To mark the Nation's bicentennial year, the Bureau has prepared this brief chartbook based on data from some of its major statistical series to illustrate patterns of change in the American economy and labor force. The Bureau's regular publications, listed under Sources of Data at the back of the book, provide greater statistical detail as well as information on how the data are obtained.

The chartbook was prepared in the Office of Publications by Rosalie Epstein and Judith Goldstein, with the cooperation of the various program offices of the Bureau. Graphics were designed by the Division of Graphic Services, U.S. Department of Labor.

The Nation's total labor force—that is, the proportion of the population at work, actively seeking work, or in the Armed Forces—rose from only 2 million in 1800 to 95 million as 1976 opened. This rapid growth made possible the dramatic transformation of the United States from a largely agricultural country—as it was in the early 1800's—to its present status as an advanced industrial nation.

Labor force growth in the past century can be divided into three broad stages. From 1870 to 1910, great waves of immigrants from Europe swelled the work force. From 1910 to 1940, internal population growth accounted for most of the increase. From 1940 to the present, the increasing proportion of women taking jobs outside the home has been an important factor in labor force growth.



The Nation's swift industrial advance would not have been possible without the rapid growth of its labor force.

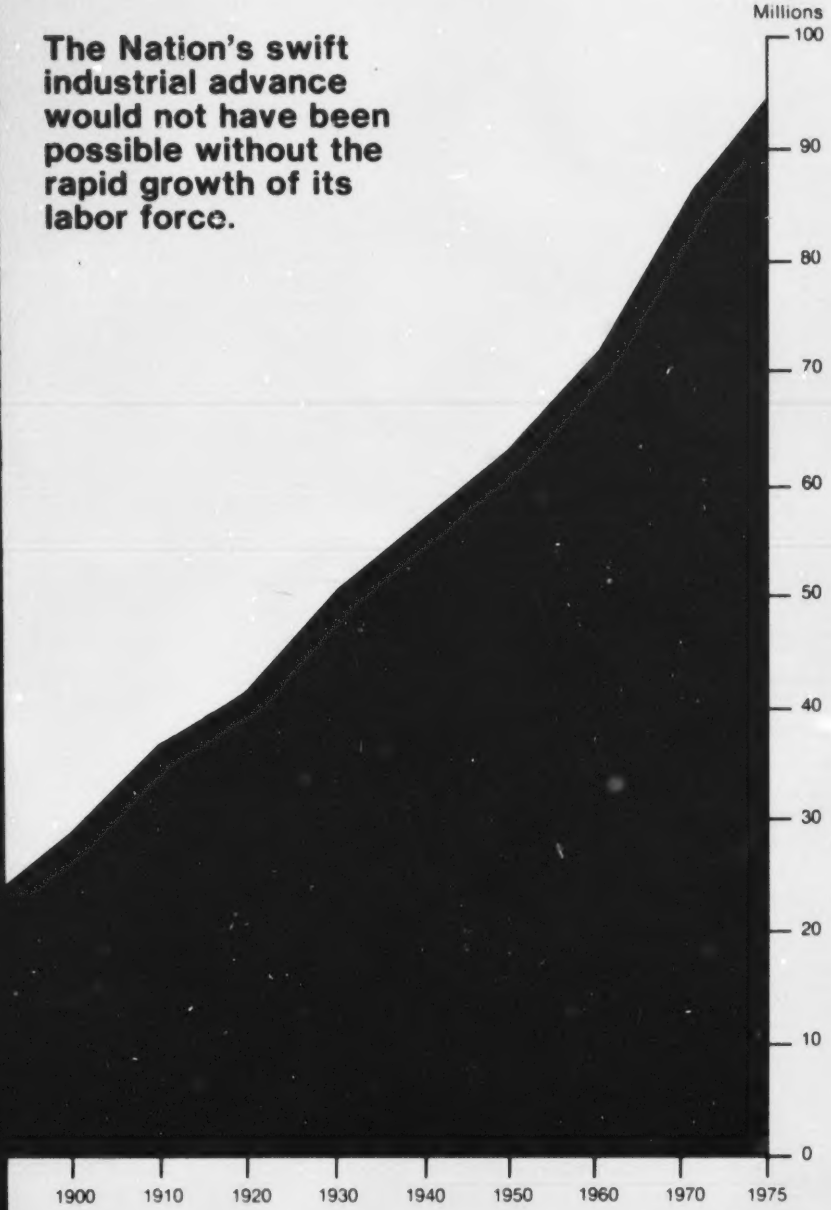
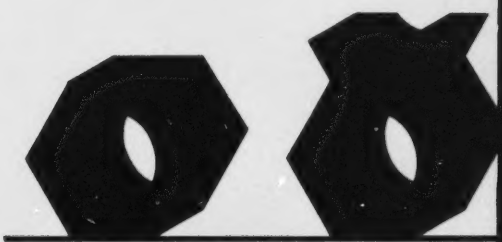


Chart 1. U.S. total labor force

Whether workers make nuts and bolts or type letters, their productivity can be measured by the amount they produce in an hour of work. Average output per hour of all persons has been rising over the years, although not always at a steady rate. From 1909 to 1950, productivity increased by 2 percent a year. For the next 20 years, growth in productivity averaged a little under 3 percent a year. Since 1970, the annual increase has been under 2 percent. As a result of all these small yearly improvements, workers today produce more than four times the hourly output of workers in the early 1900's.

Advances in technology, greater capital investment, and the increasing skill and education of American workers are among the many causes of the long-term rise in productivity.



Today's workers produce more than four times as much in one hour as workers did early in the century.

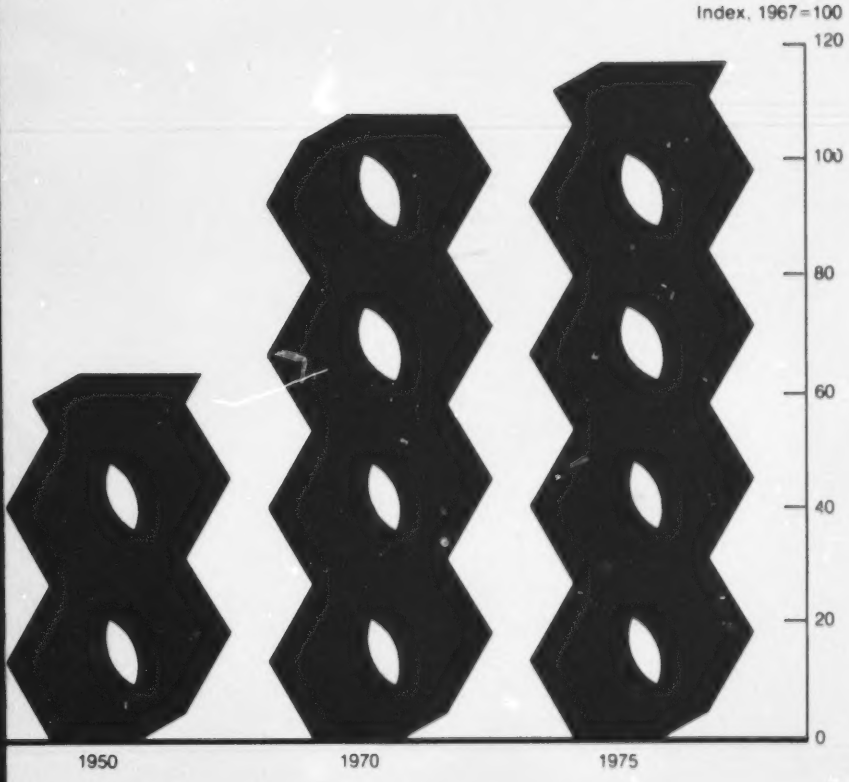
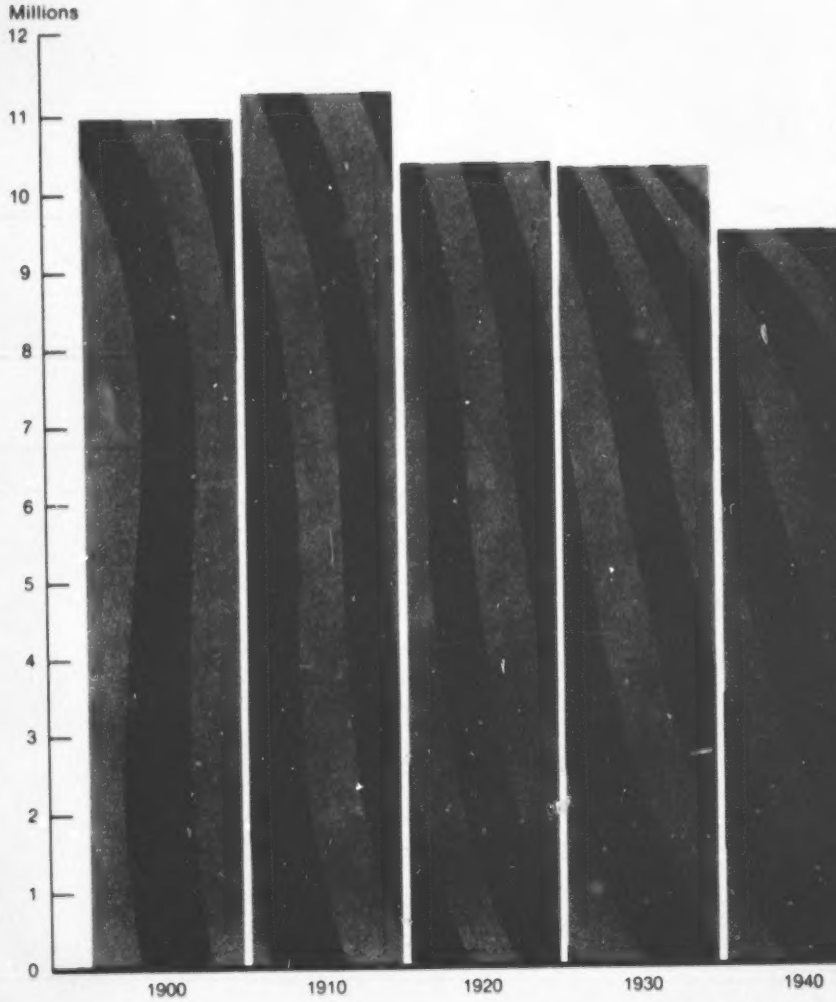


Chart 2. Index of output per hour of all persons, total private economy


Millions
12
11
10
9
8
7
6
5
4
3
2
1
0
1900
1910
1920
1930
1940

During the Nation's first century, most workers were employed in farming. By 1900, however, although farm employment was still increasing, more workers were employed in nonfarm industries such as manufacturing and trade. By 1920, farm employment had started its long-term decline. In 1975, fewer than 4 million persons, 4 percent of those employed, worked on farms.

But farm output increased greatly even though the farm work force was declining—yield per acre rose with the use of improved fertilizer and feeds, pesticides, and mechanized equipment.

The transfer of labor from agriculture to other industries has been an important source of growth for the economy as a whole.

The number of workers in farm employment has been declining since the early 1900's.

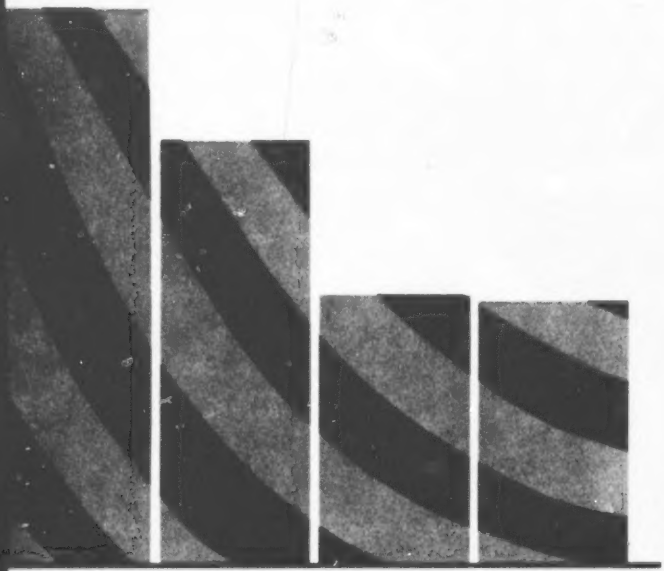
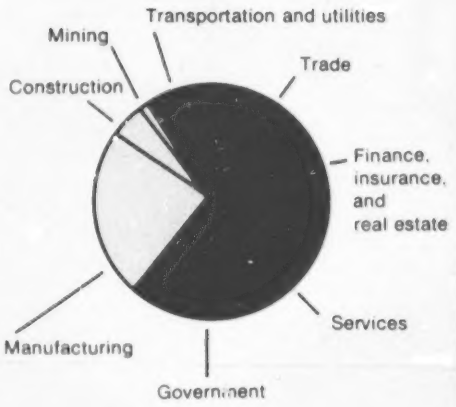


Chart 3. Persons employed in agriculture

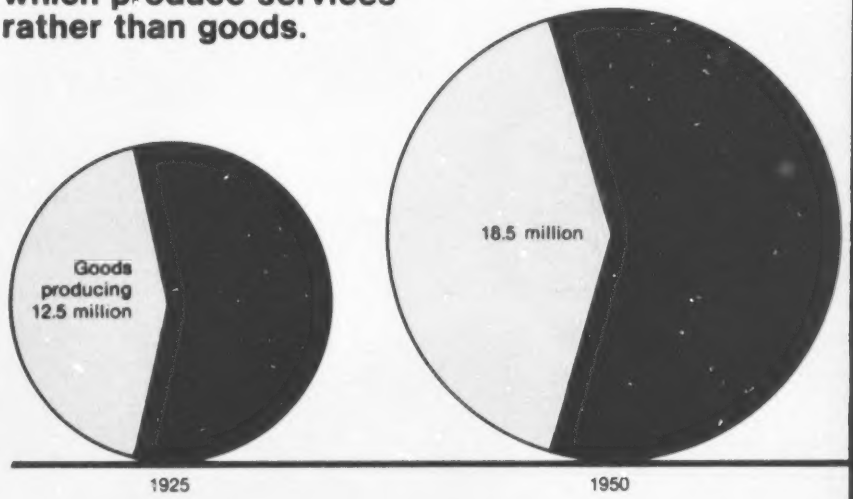
Since 1925, service-producing industries have contributed almost 80 percent of the total growth in nonfarm employment. Among the industries creating the greatest number of jobs since 1950 have been State and local government, trade, and services such as health care.

In 1975, of the 77 million employees in nonfarm jobs, 54 million or 7 out of 10 worked in service-producing industries.



Distribution of nonagricultural employment by industry division, 1975

Most of the employment growth in the past 50 years has been in industries which produce services rather than goods.



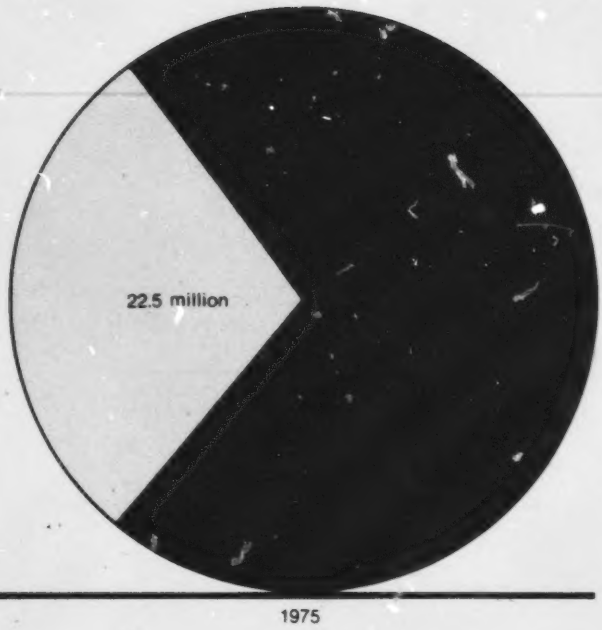


Chart 4. Employees on nonagricultural payrolls by industry sector

Since the first computer was built 30 years ago, computer-related occupations have mushroomed and now provide employment for hundreds of thousands of workers in professional, technical, clerical, and repair occupations.

While technology has created some new occupations, it has also lessened the need for others. For example, the use of dictating machines has resulted in a sharp decline in the employment of stenographers. Elevator operators, too, find jobs much more scarce as automatic elevators replace the old manual models.

Opportunities for training, retraining, and continuing education become increasingly important for workers in a fast-changing world.

Advances in technology have created new occupations . . .

. . . and caused others to decline.

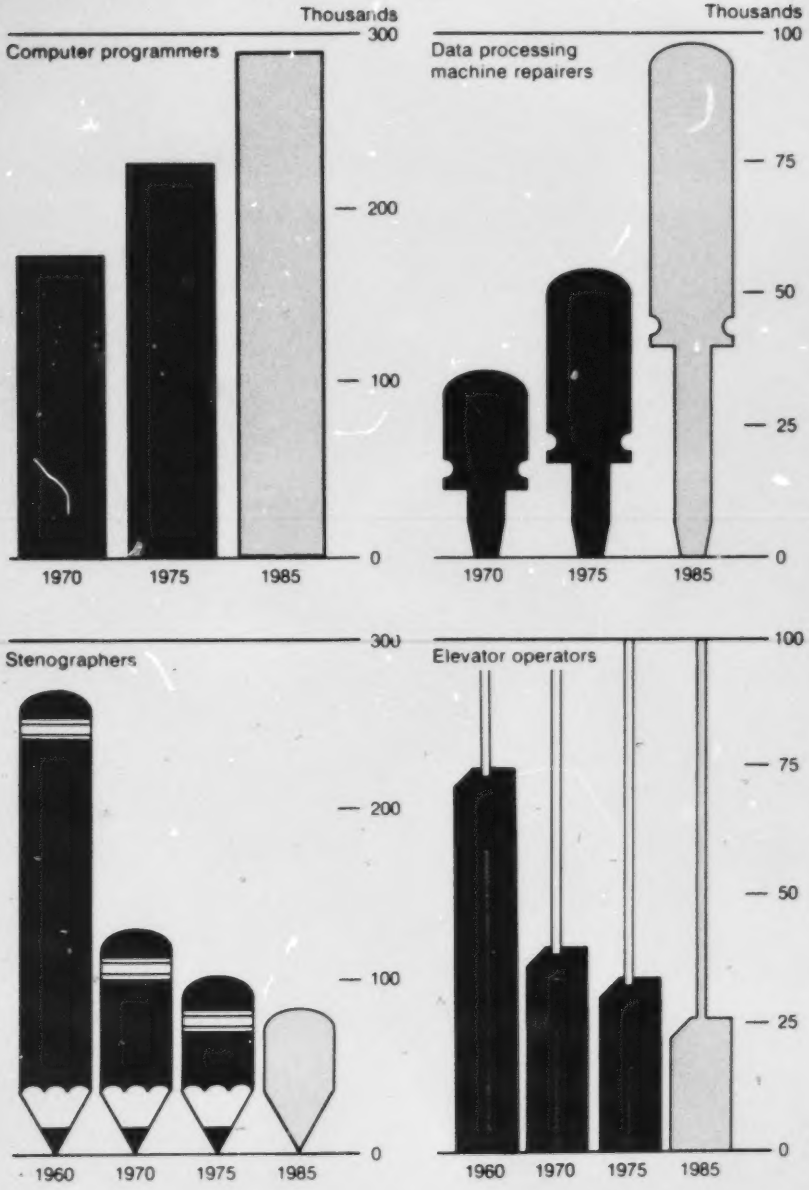


Chart 5. Employment in selected occupations

The proportion of women who are in the labor force has increased over the past quarter-century—from 33.9 percent of all women in 1950 to 46.4 percent in 1975.

The increase has not occurred evenly among all age groups. In 1950, young women just out of school were the most likely to be working. By 1960, a relatively greater number of older women were at work, having obtained jobs after their children had grown and their home responsibilities had lessened. Between 1960 and the present, there has been a substantial increase in the labor force participation of women in their twenties and early thirties, even among those with young children.

The changing role of women in society is mirrored in the rising proportion of women who are in the labor force . . .

Rising divorce and separation rates and the steep decline in the birth rate have also increased the rate of entry of women into the labor force.

In contrast, earlier retirements have lowered men's participation rates. Other alternatives to work such as education also have played a role.

. . . At the same time, men's participation has been declining.

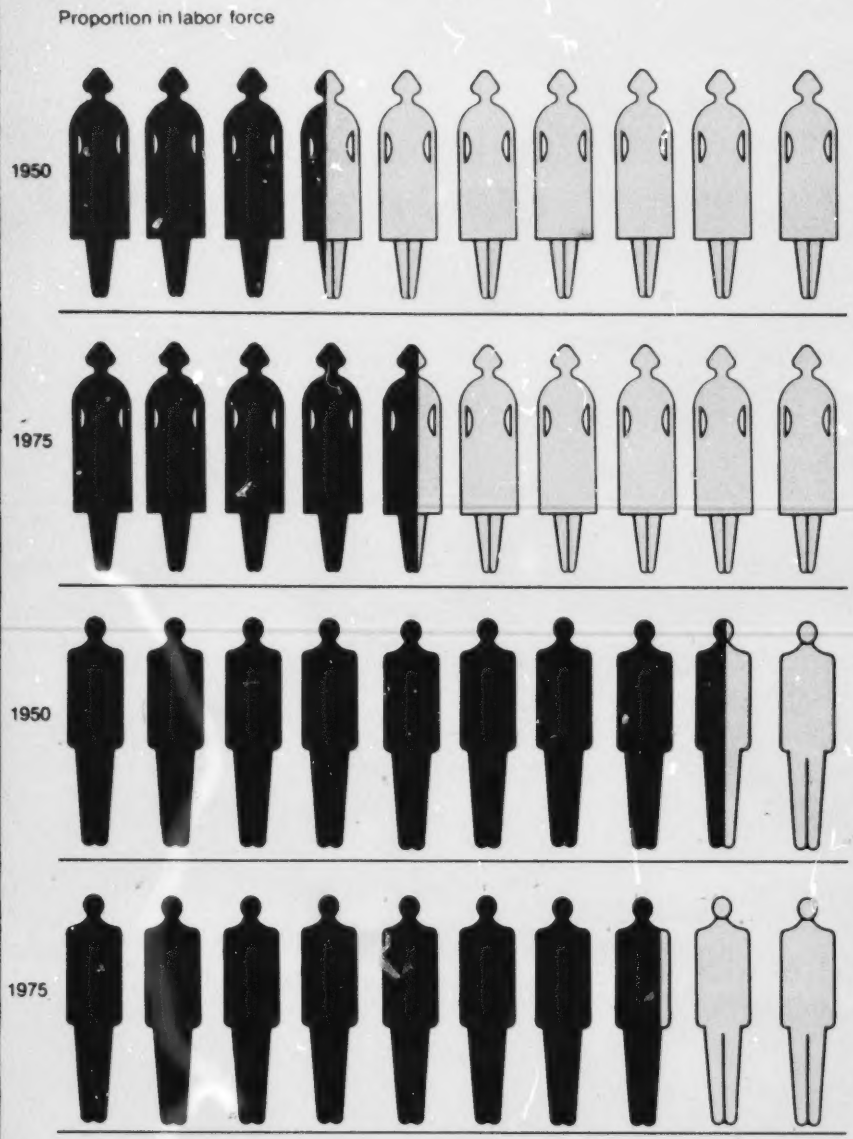


Chart 6. Labor force participation rates by sex

Since the end of World War II, there have been six business downturns, each marked by high unemployment. The most recent downturn in 1973-75 raised unemployment to its highest level in 35 years. The number of unemployed averaged 7.8 million in 1975, or 8.5 percent of the labor force.

Young people, high school drop-outs, blue-collar workers, and black workers have had higher unemployment rates then others in the labor force.

Sharp increases in unemployment have been a recurring problem in our economy.

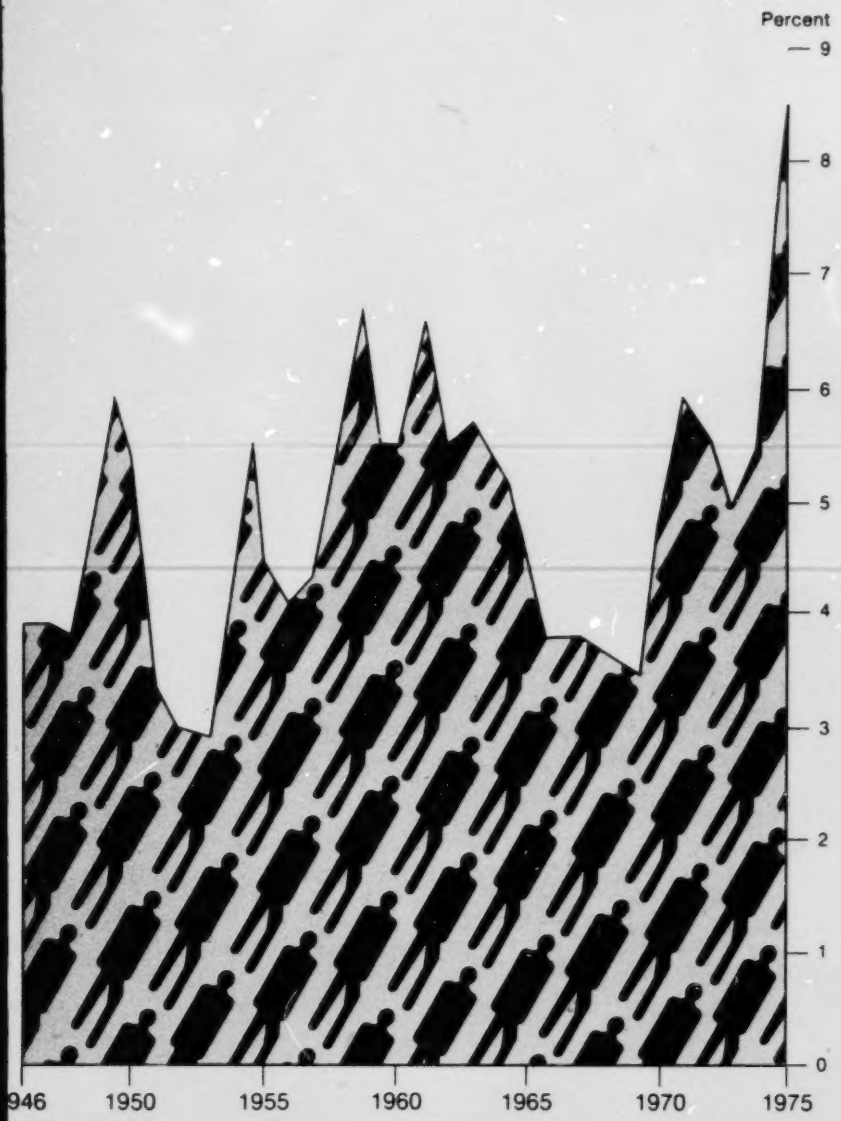
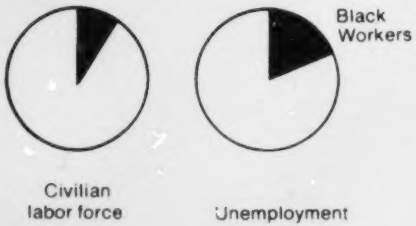
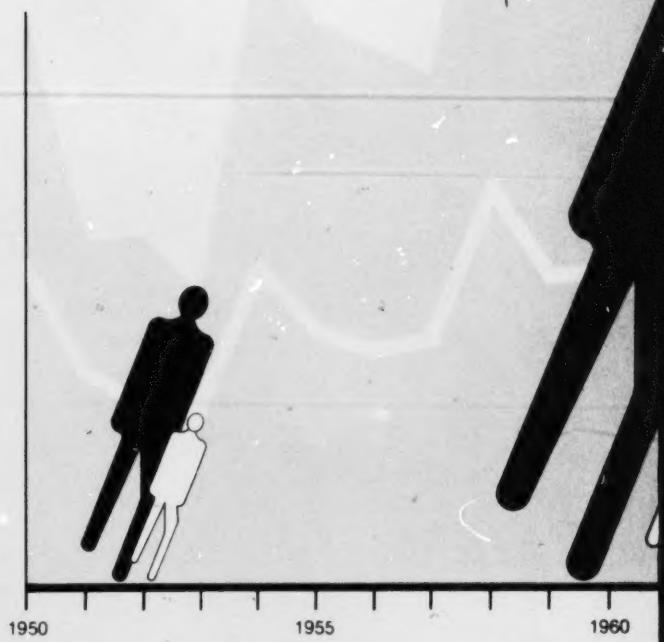


Chart 7. Unemployed as percent of civilian labor force

Black workers made up 11 percent of the labor force in 1975, about the same as their share of the population. However, they were 19 percent of the unemployed.

Higher rates of unemployment for black compared to white workers have reflected, among other factors, the less secure and lower skilled jobs often held by blacks, a lower level of educational attainment, and racial discrimination.





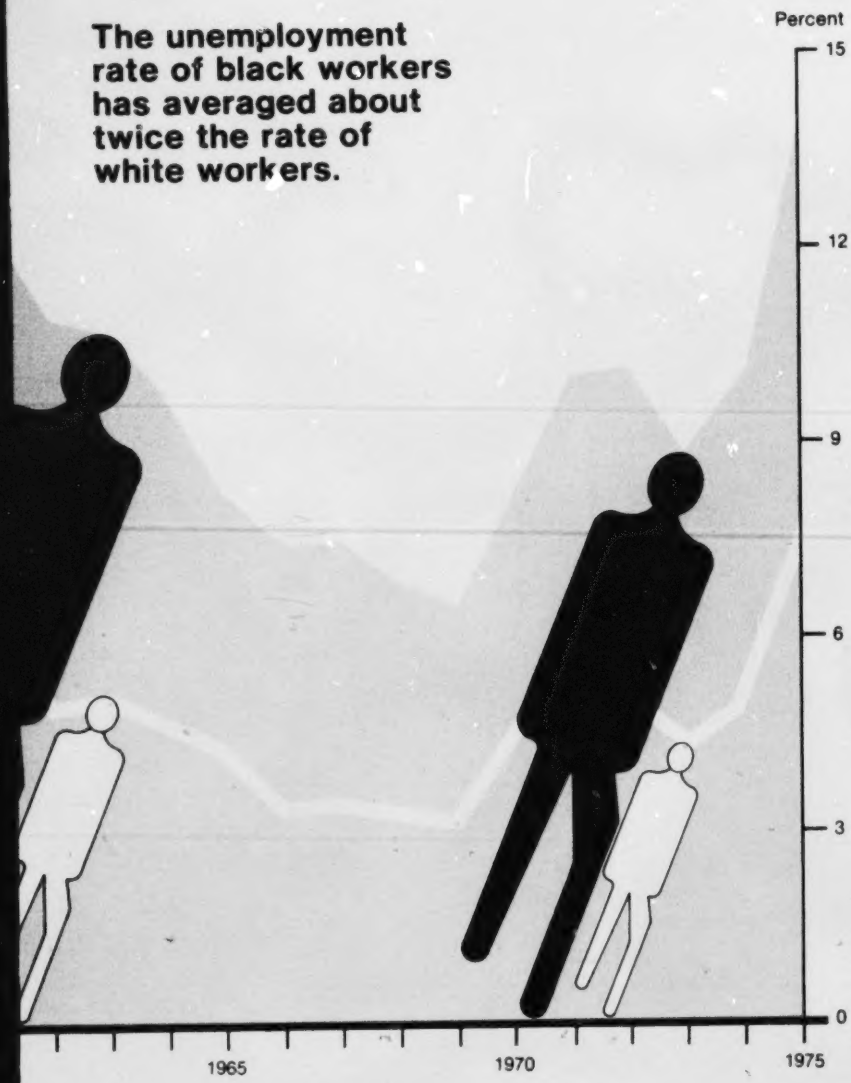
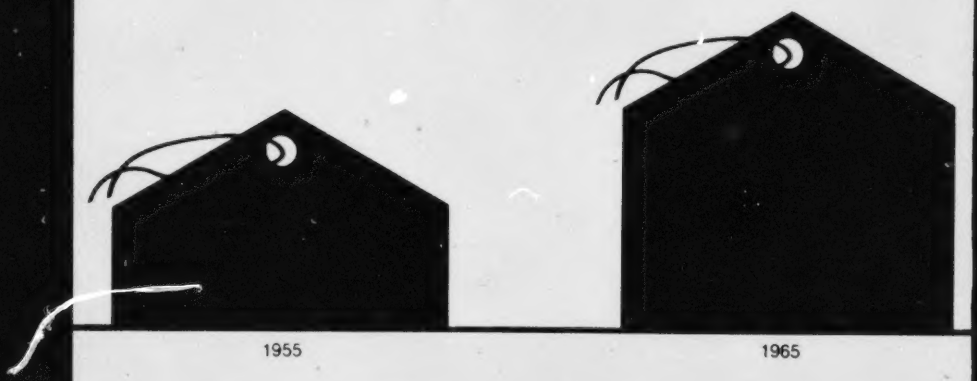


Chart 8. Unemployed as percent of civilian labor force by race

Consumer prices rose more than 7 percent a year on the average from 1965 to 1975, compared with an increase of less than 2 percent a year from 1955 to 1965.

Prices started to rise rapidly in the mid-1960's as the government stepped up spending for the Vietnam War and social programs at a time when private spending was already high. In the early 1970's, price and wage controls—the first put into effect in peacetime—slowed inflation temporarily, but prices climbed sharply in 1973 and 1974. Among the reasons for the rise were increased world demand for U.S. products, grain in particular, the shutoff of oil supplies by Arab countries, and the end of price controls. By 1975, the effects of the worldwide business downturn helped slow the pace of price increases.



Consumer prices have risen almost four times as fast since 1965 as in the previous 10 years.

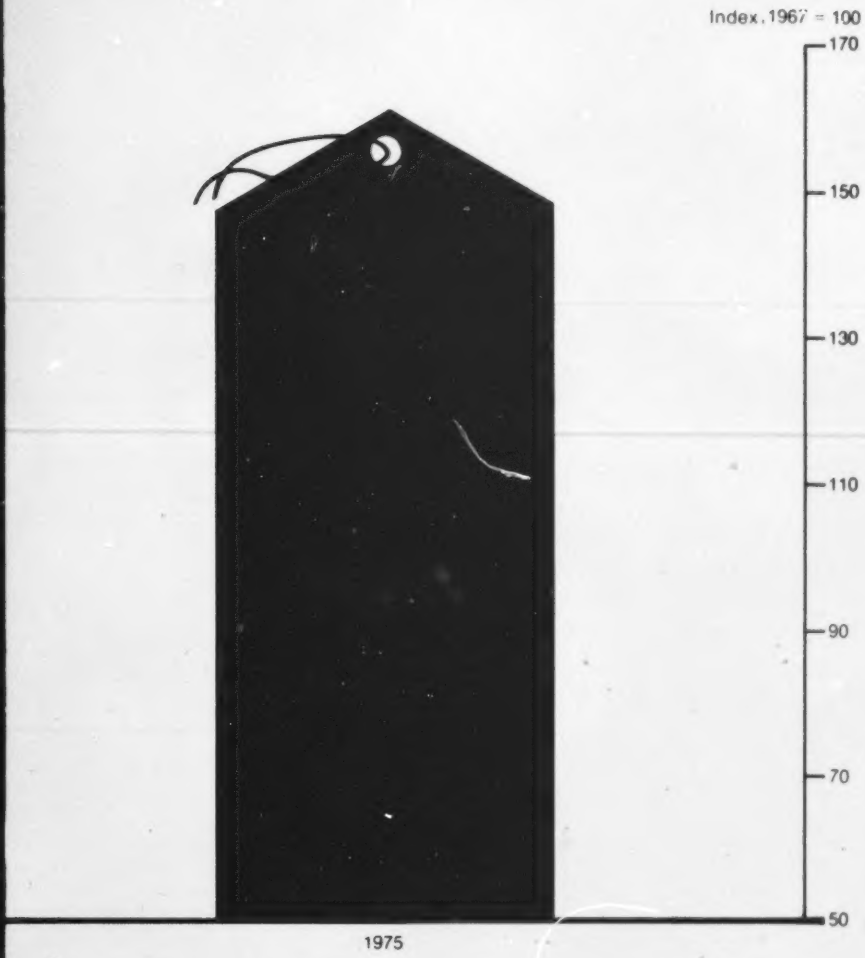
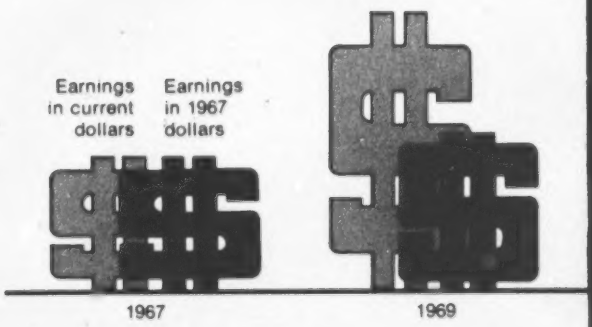


Chart 9. Consumer price index for urban wage earners and clerical workers

Workers' hourly earnings have increased by 73 percent since 1967. However, in "real" terms—measured in dollars of constant purchasing power—earnings have advanced only 7 percent. Since 1973, prices have risen more rapidly than money earnings so that real earnings have actually declined.

Years of high rates of inflation have spurred union efforts to obtain cost-of-living escalator clauses in collective bargaining agreements. Escalator clauses provide for periodic automatic adjustment of wage rates based on changes in prices. More than 6 million workers were covered by such provisions in 1975.

Although workers' hourly earnings have risen steadily, much of the gain in recent years has been eroded by rapidly rising prices.



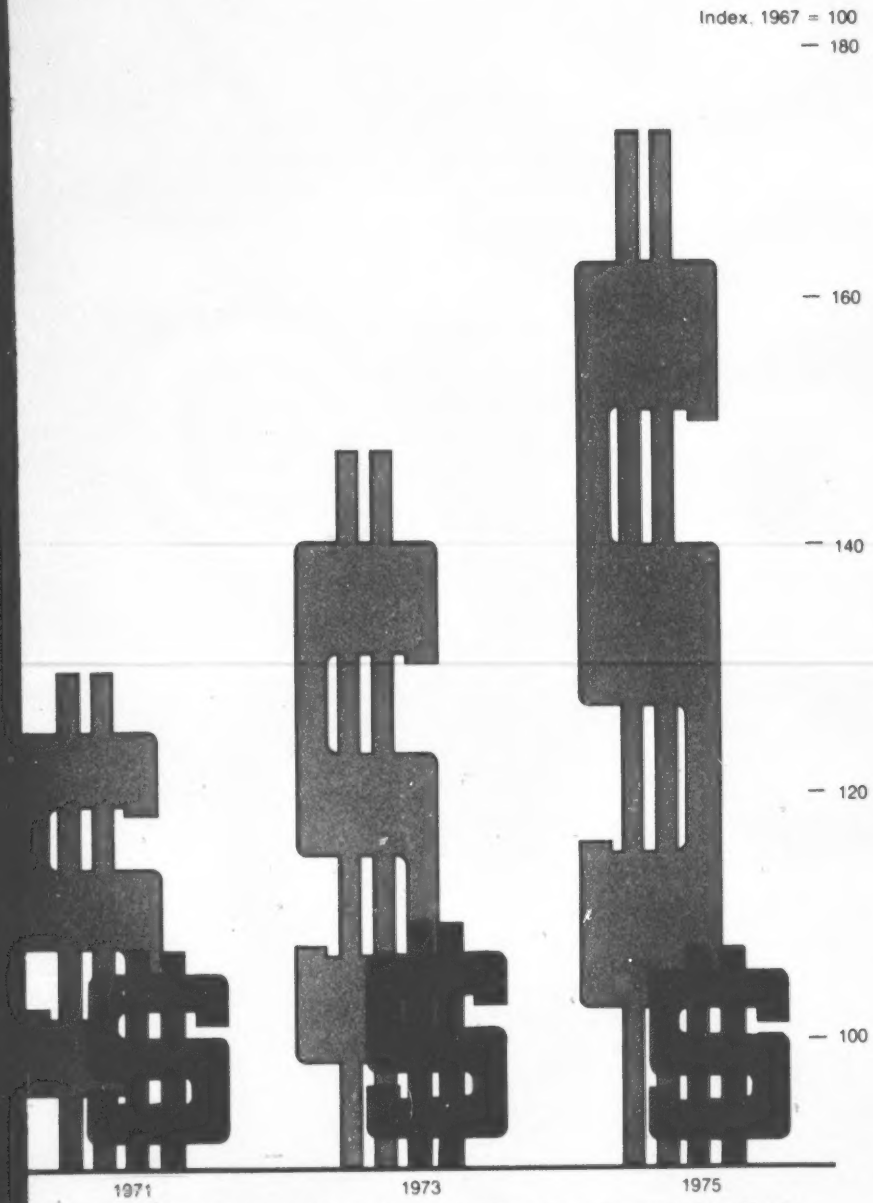


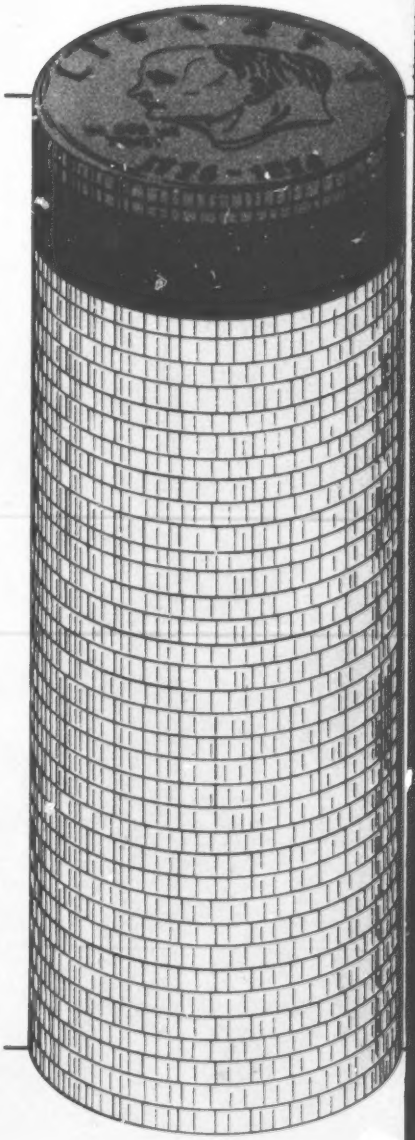
Chart 10. Hourly earnings index, production and nonsupervisory workers in the private nonfarm economy, in current and 1967 dollars

At the turn of the century, most workers were paid only for the time they worked. Today, in addition to pay for working time, workers receive a variety of supplements that contribute to their well-being and financial protection.

The supplements are in the form of 1) retirement programs financed by employers through Federal social security contributions or private pension plans; 2) paid time off for vacation and holidays; and 3) life insurance and health benefits. Other supplements include unemployment insurance, matching payments into savings funds, and year-end bonuses.

Supplements to pay have grown as a share of total compensation. For production workers in manufacturing, supplements were about 15 percent of compensation in 1959 and 21 percent in 1974.

Retirement benefits, paid vacations, and other supplements to pay have become a larger share of workers' total compensation.



1959

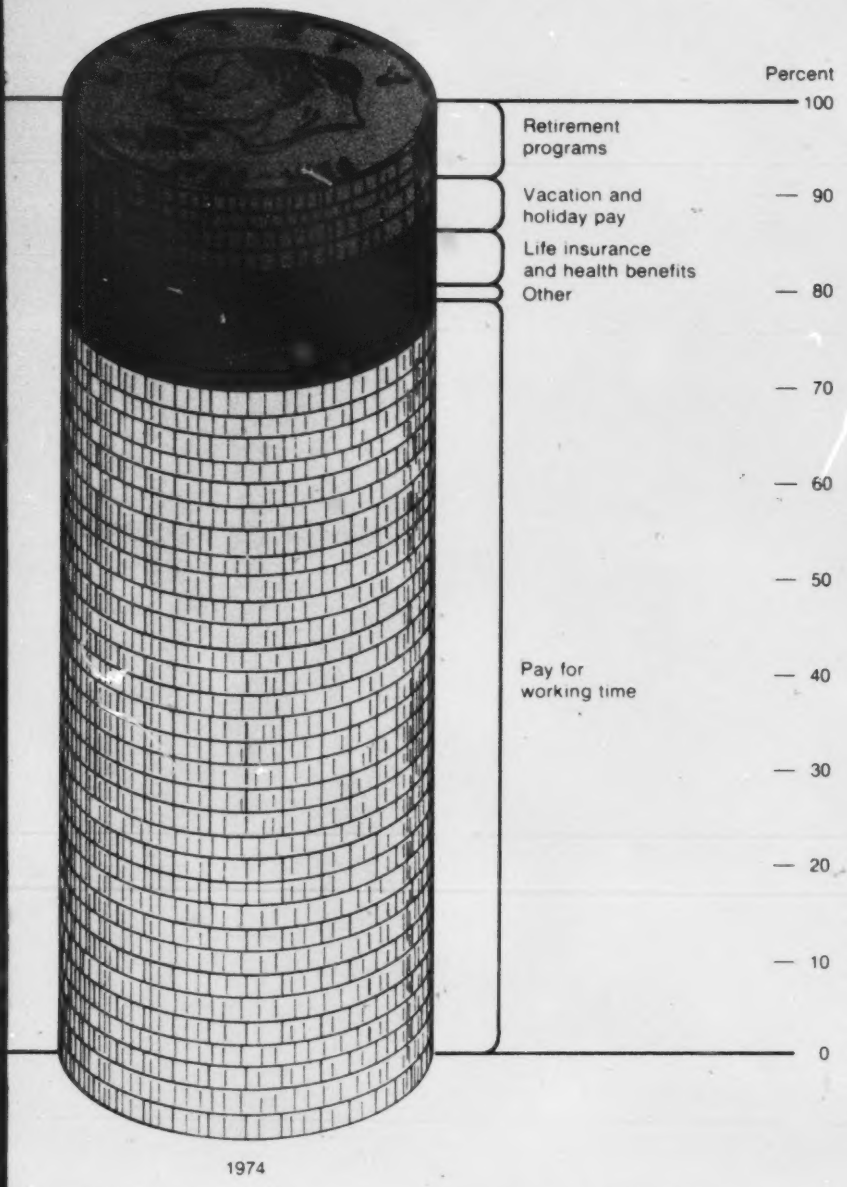
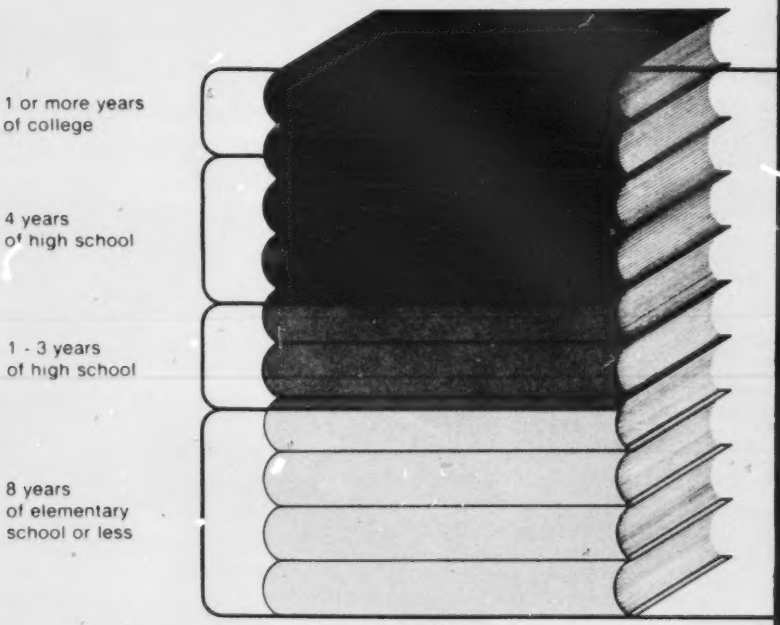


Chart 11. Employee compensation, manufacturing production workers, percent distribution

Young people have been staying in school longer. For example, in 1952 only 43 percent of the labor force were high school graduates; by 1975, this proportion had increased to 71 percent. The proportion of workers having some college education almost doubled between 1952 and 1975.

In contrast, 38 percent of the work force in 1952 had not progressed beyond an elementary school education; in 1975 only 12 percent had so little education.

Over the past two decades, the rise in the educational level of American workers has gone hand in hand with the increasing demand for more highly trained and educated workers. In future years, however, the continuing increase in the proportion of young people going to college may result in more graduates than the number of jobs requiring a college education. As graduates settle for jobs for which they may be "overqualified," dissatisfaction and increased job-hopping may be the result.



1952

The level of education of American workers has risen substantially in the last quarter-century.

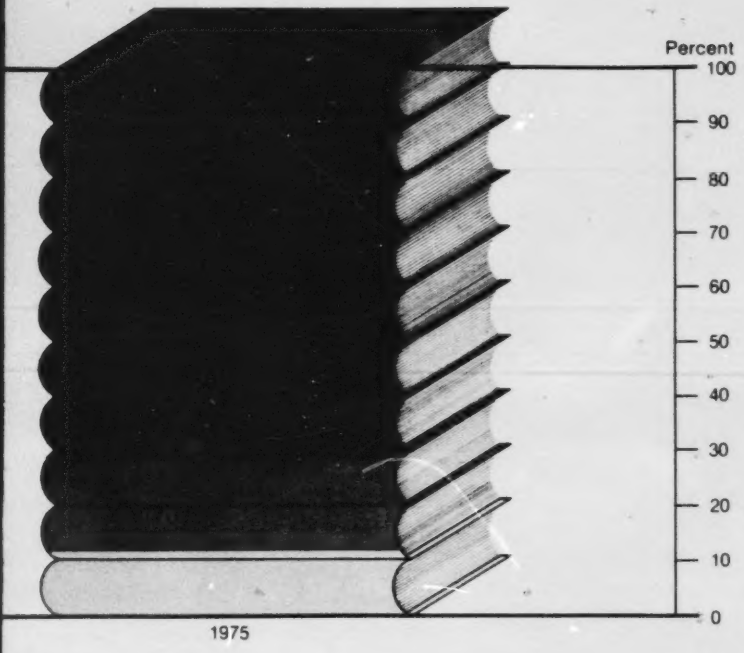
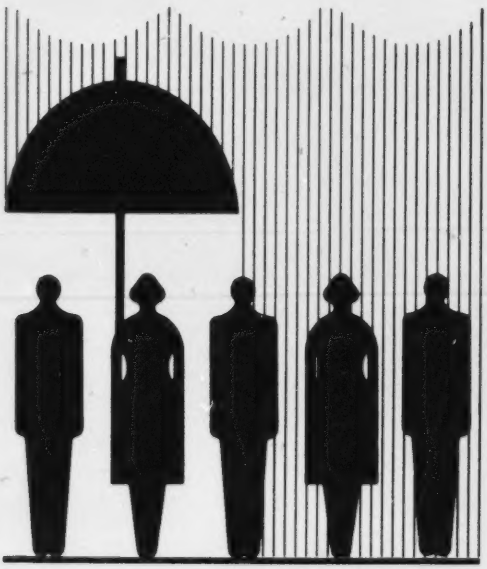


Chart 12. Educational attainment of the civilian labor force, percent distribution

The unemployment insurance system provides weekly payments to unemployed workers while they are looking for jobs. Established in the 1930's, unemployment compensation was at first available to fewer than half of all workers. Over the years, both Federal and State laws extended insurance protection—by 1974, 82 percent of all workers were covered. Eligibility requirements and the amount and duration of benefits vary from State to State.

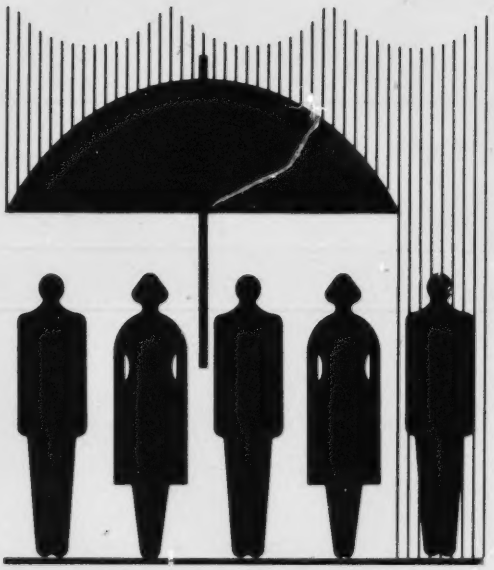
Still outside the regular program are most household workers, farm workers, and local government employees, and some State government employees. Temporary legislation passed in 1974 authorized payments to these workers during periods of high unemployment.

Some private employers have set up supplemental unemployment benefit plans which provide additional income for workers when they are laid off.



1938

Government unemployment insurance now gives 4 out of 5 workers some income protection during periods of joblessness.



1974

Chart 13. Proportion of workers covered by Federal and State unemployment insurance programs

Passage of the Wagner Act in 1935—which guaranteed the right of workers tc organize and bargain collectively—marked the beginning of the rapid growth of unions in the United States. By the end of World War II, U.S. union membership had quadrupled. Over the following decades, membership grew at a much slower rate—to 20 million in 1974.

Despite this expansion in numbers, union membership has failed to keep up with the growth of the labor force. Union representation in the labor force in 1974, at 21.7 percent, was at its lowest level since 1944.

Union membership alone is no longer an accurate measure of the number of workers represented by labor organizations. Since the early 1960's, professional and government employee associations increasingly have shifted to bargaining activities. Together, unions and employee associations count 22.8 million U.S. workers as members, about one-fourth of the labor force.

Although union membership has continued to grow . . .

. . . growth has not kept pace with the increase in the labor force.

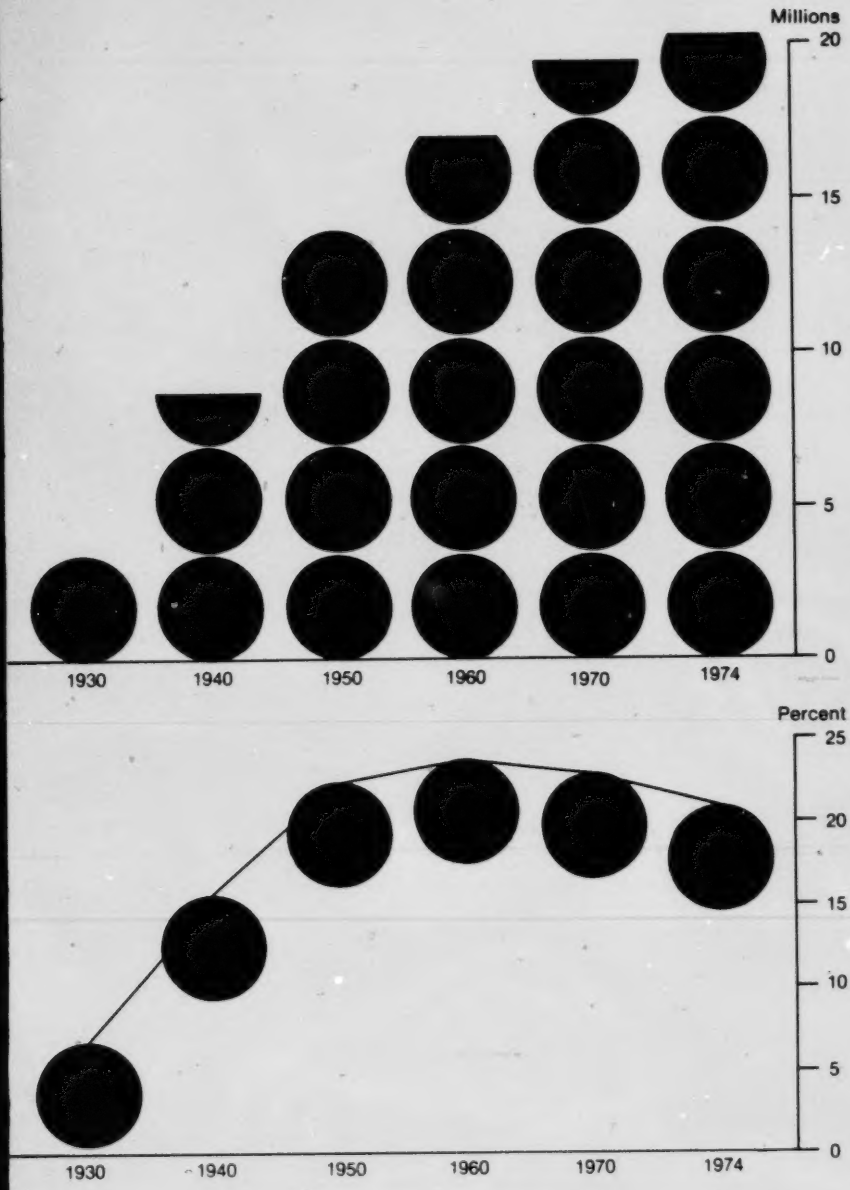
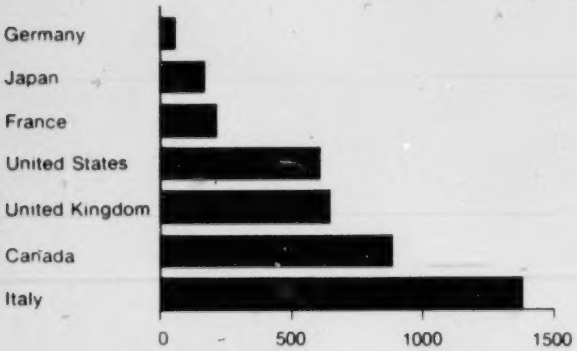


Chart 14. U.S. membership in labor unions and membership as a proportion of labor force

Most labor-management disputes in the United States are settled without a strike. In 28 of the 30 years since the end of World War II, idleness due to work stoppages has amounted to less than one-half of 1 percent of working time. Most strikes are settled in 2 weeks or less.

Wages and other economic benefits have been the primary issues in most strikes, but working conditions, union security, and disputes among unions also have caused work stoppages.

Average idleness due to strikes in the United States compared with other industrialized countries in the first five years of the 1970's is shown below.



Days idle per thousand employees.
1970-74 annual average

Particular strikes often receive wide publicity, but the actual amount of time away from work because of labor-management disputes is relatively small.

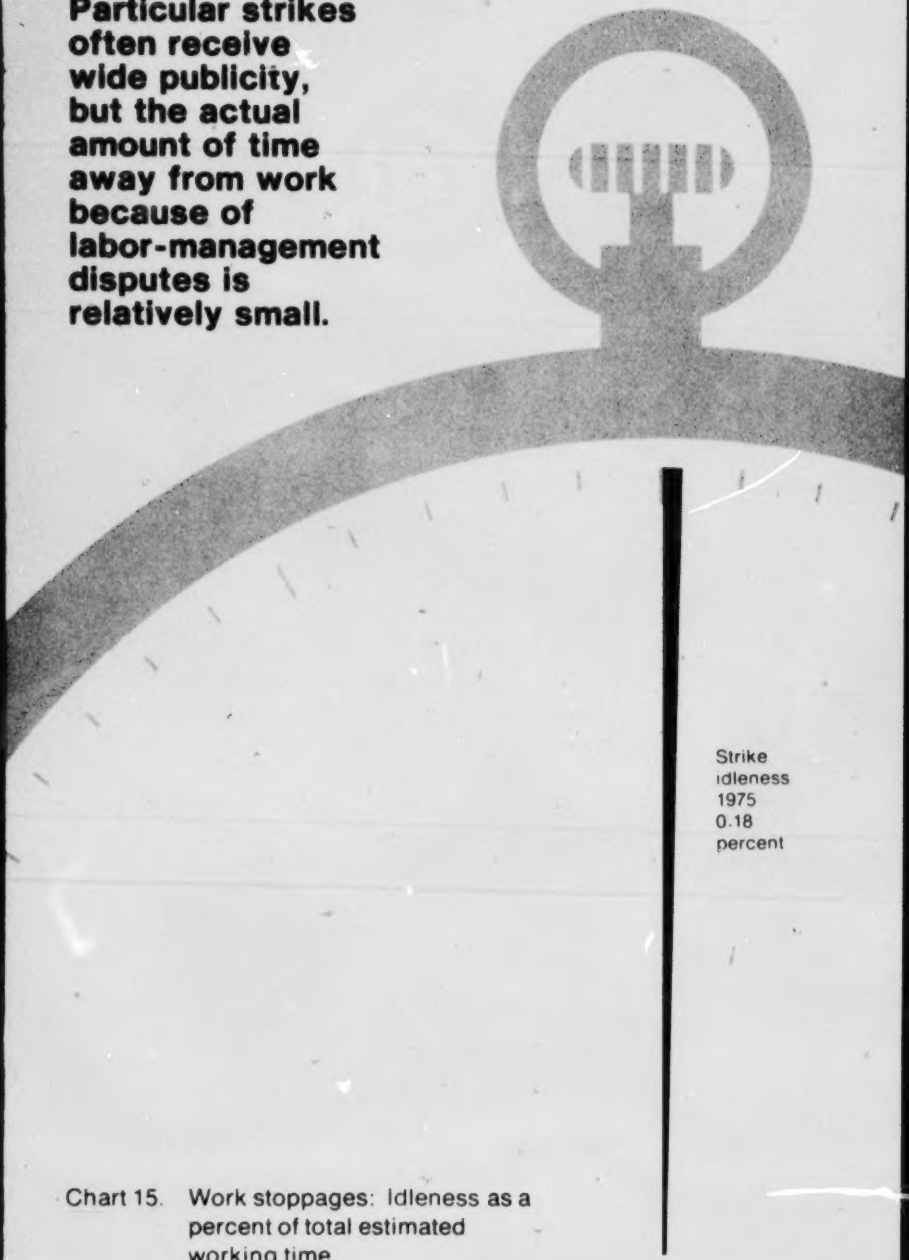
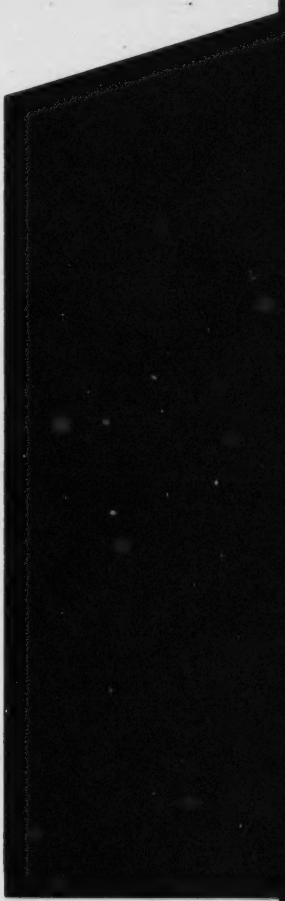


Chart 15. Work stoppages: Idleness as a percent of total estimated working time

The labor force grew at a particularly rapid pace during the last decade. This rate will not continue into the 1980's because the number of young people reaching working age will decline substantially, reflecting the steep drop in the birth rate during the 1960's. Nevertheless, the total labor force is expected to approach the 117-million mark by 1990.

Women are expected to account for much of the labor force expansion in the 1980's as an increasing proportion take jobs outside the home and as men's labor force participation continues to decline.

During the next 15 years, more than 20 million workers are expected to join the labor force.



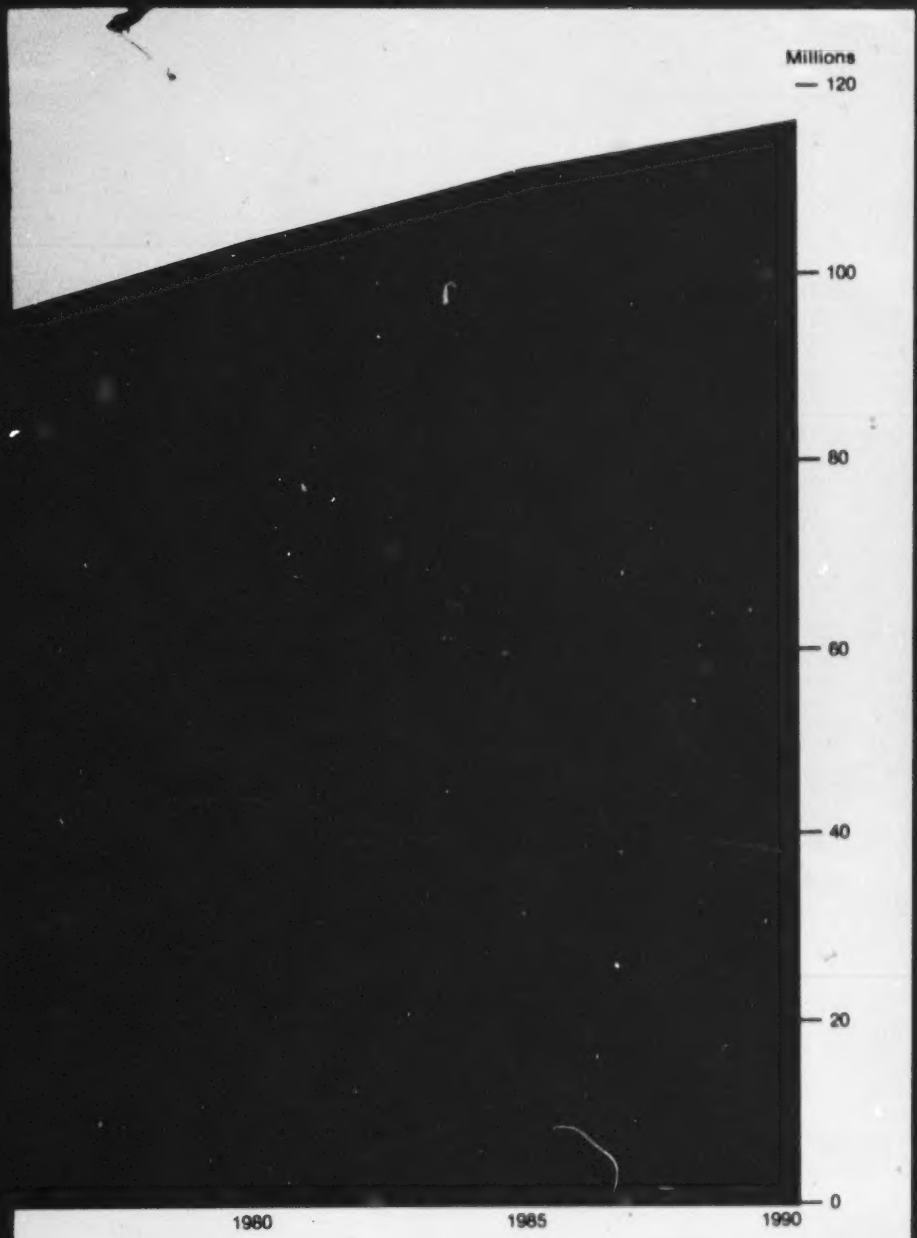


Chart 16. U.S. total labor force by sex: Projections to 1990

Sources of Data

Chart 1

1800-1920—Stanley Lebergott, *Manpower in Economic Growth: The American Record Since 1800*, McGraw Hill, 1964, pp. 510, 512; 1930-75—*Employment and Earnings*, May 1976, table A-1. Data for 1800-1890 are for persons 10 years of age and older; 1900-1940, persons 14 years of age and older; 1950-75, persons 16 years of age and older.

Chart 2

1909-1930—unpublished data, Division of Productivity Research, Bureau of Labor Statistics; 1950-75—*Monthly Labor Review*, May 1976, p. 103, table 31.

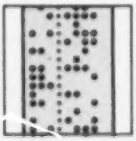
Chart 3

1900-1940—Lebergott, *Manpower in Economic Growth*, p. 512; 1950-75—*Employment and Earnings*, May 1976, table A-1. Data for 1900-1940 are for persons 14 years of age and older; 1950-75, persons 16 years of age and older.

Chart 4

Employment and Earnings, May 1976, table B-1.

Chart 5



1960 — 1960 Decennial Census, Bureau of the Census; 1970-85, Bureau of Labor Statistics. Data for 1970 and 1985 are unpublished; data for 1975 are in *Employment and Earnings*, January 1976, p. 11.

Chart 6

Employment and Earnings, May 1976, table A-2.

Chart 7

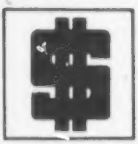
Employment and Earnings, May 1976, table A-1.

Chart 8

1950-74—*Handbook of Labor Statistics 1975*, table 60; 1975—*Employment and Earnings*, January 1976, p. 138, table 3.

Chart 9.

1955 and 1965—*Handbook of Labor Statistics 1975*, table 122; 1975—*Monthly Labor Review*, May 1976, p. 89, table 23.

Chart 10. 

Current Wage Developments, May 1976, p. 43, table 1.

Chart 11.

1959—*Handbook of Labor Statistics 1975*, table 119; 1974—unpublished data, Division of General Compensation Structures, Bureau of Labor Statistics.

Chart 12.

1952—*Handbook of Labor Statistics 1975*, table 12; 1975—*Monthly Labor Review*, February 1976, p. 48, table 2. Data for 1952 are for persons 18 years of age and older; 1975, persons 16 years of age and older.

Chart 13.

Employment and Wages, Fourth Quarter 1974, table 1.

Chart 14.

1930-72—*Handbook of Labor Statistics 1975*, table 158; 1974—unpublished data, Division of Industrial Relations, Bureau of Labor Statistics.

Chart 15.

Monthly Labor Review, May 1976, p. 107, table 37; comparison with foreign countries calculated from data in *Handbook of Labor Statistics 1975*, table 177.

Chart 16.

1970 and 1975—*Employment and Earnings*, May 1976, table A-2; projections—unpublished data, Division of Labor Force Studies, Bureau of Labor Statistics.